

Mathematics 1220 Calculus II, Examination 2, Sep 25,27, 2003

Find all the integrals. Remember that definite integrals should have numerical answers. You MUST show your work.

1a.
$$\int \frac{dx}{(1+x)\sqrt{x}}$$

1b.
$$\int \frac{2+x}{1+x} dx$$

2.
$$\int e^x x dx$$

3.
$$\int_1^2 \frac{x^2 - 4x + 1}{x(x-4)^2} dx$$

4a.
$$\int \frac{dx}{\sqrt{1-x^2}}$$

4a.
$$\int \frac{x dx}{1+4x^2}$$

5.
$$\int \ln x dx$$